

HEAVY-DUTY TRUCK TECHNICIAN - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

Explore More About This Program: <https://cwi.edu/program/heavy-duty-truck-technician>

Degree Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Diesel, Automotive, and Powersports Technology
- **Program Code:** TTEC.AAS
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
<i>Complete the following recommended course to fulfill the GEM 1 requirement:</i>		
ENGL 101	Writing and Rhetoric I ¹	3
<i>Complete the following recommended course to fulfill the GEM 2 requirement:</i>		
COMM 101	Fundamentals of Oral Communication ¹	3
<i>Complete the following recommended course to fulfill the GEM 3 requirement:</i>		
MATH 118 & 118L	Technical Math and Technical Math Lab ¹	3
<i>Complete the following recommended course to fulfill the GEM 6 requirement:</i>		
PSYC 140	Human Relations for Career and Personal Success ¹	3
<i>Complete the following recommended course to fulfill the General Education Elective requirement:</i>		
CWI 101	Connecting With Ideas ¹	3
Major Requirements		
TTEC 102	Foundation and Safety	4
TTEC 106	Electrical and Electronic Systems	4
TTEC 110	Engines/Engine Controls	4
TTEC 120	Suspension, Steering, and Brakes	4
TTEC 130	Drivetrains	4
TTEC 140	Preventive Maintenance/HVAC	4
TTEC 150	Truck Driving Skills	3
TTEC 220	Advanced Electrical Systems	4
TTEC 230	Advanced Engine/Engine Controls	4
TTEC 240	Advanced Drivetrains	4
TTEC 250	Advanced Suspension, Steering, and Braking Systems	4
TTEC 260	Advanced Preventive Maintenance/HVAC	4
TTEC 290	Heavy-Duty Truck Technician Capstone	4
Minimum Credit Hours Required		66

¹ The courses listed under the General Education Requirements section are recommended by the department as the most beneficial general education (GE) options for students in this program. **Please note that students may fulfill their GE requirements by completing another course from within the applicable general education category.**

Plan of Study Guide

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this Plan of Study Guide. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your Student Success Advisor for any questions regarding this course sequence plan.

****NOTE****

Heavy-Duty Truck Technician (TTEC) majors are required to complete five general education courses in order to receive an Associate of Applied Science degree. Prior to beginning their TTEC courses, students must successfully complete any two general education courses. While it is recommended that students complete all five of their required general education courses during the spring and/or summer semester(s) prior to beginning the program, students may elect to take the additional required GEM courses during the summer semester between their first and second year in the program, if preferred. Students may also complete GEM courses during regular semesters while enrolled in TTEC courses if they feel capable of doing so. **Students should note that the completion of a GEM 1 (or GEM 2), GEM 3, and GEM 6 course are required prior to beginning their final semester of the program.**

First Year

		Credit Hours
Summer		
CWI 101	Connecting With Ideas (Recommended GE Elective) ¹	3
ENGL 101	Writing and Rhetoric I (Recommended GEM 1) ¹	3
Total Semester Credit Hours		6
Fall		
MATH 118 & 118L	Technical Math and Technical Math Lab (Recommended GEM 3) ¹	3
TTEC 102	Foundation and Safety	4
TTEC 106	Electrical and Electronic Systems	4
TTEC 110	Engines/Engine Controls	4
Total Semester Credit Hours		15
Spring		
PSYC 140	Human Relations for Career and Personal Success (Recommended GEM 6) ¹	3
TTEC 120	Suspension, Steering, and Brakes	4
TTEC 130	Drivetrains	4
TTEC 140	Preventive Maintenance/HVAC	4
Total Semester Credit Hours		15
Second Year		
Summer		
COMM 101	Fundamentals of Oral Communication (Recommended GEM 2) ¹	3
TTEC 150	Truck Driving Skills	3
Total Semester Credit Hours		6
Fall		
TTEC 220	Advanced Electrical Systems	4
TTEC 230	Advanced Engine/Engine Controls	4
TTEC 240	Advanced Drivetrains	4
Total Semester Credit Hours		12
Spring		
TTEC 250	Advanced Suspension, Steering, and Braking Systems	4
TTEC 260	Advanced Preventive Maintenance/HVAC	4
TTEC 290	Heavy-Duty Truck Technician Capstone	4
Total Semester Credit Hours		12
Minimum Credit Hours Required		66

¹ The general education (GE) courses listed above are recommended by the department as the most beneficial GE options for students in this program. **Please note that students may fulfill their GE requirements by completing another course from within the applicable general education category.**

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking and problem-solving skills identified by the National Institute for Automotive Service Excellence (ASE) Medium/Heavy-Duty Truck Technician Task List for the purpose of becoming a successful entry-level heavy-duty truck technician. Areas of advanced

knowledge and skill development include electrical systems, engines and engine controls, braking systems, drivetrains, steering and suspension, preventive maintenance, and HVAC.

- Demonstrate practiced written and oral communication skills consistent with industry.
- Locate and utilize service information and specifications in service manuals and web-based information systems.
- Demonstrate desirable work habits and interpersonal skills essential to successful job performance.
- Demonstrate knowledge and application of safety practices specifically related to heavy-duty diesel repair and maintenance at CWI.
- Demonstrate critical thinking and problem-solving skills.
- Read, interpret, and communicate basic mathematical concepts.

(The CWI Heavy-Duty Truck Technician's program learning outcomes are adapted from the National Institute for Automotive Service Excellence (ASE) Master Standards for Medium/Heavy-Duty Truck Certification.)